REMARKS

Applicant's counsel thanks the Examiner for the careful consideration given the application and for the courteous telephone interview conducted on January 25, 2010. During the telephone interview, applicant's counsel discussed proposed changes to the claims and how these amended claims define over the prior art. First, applicant's counsel discussed amending the claims to more clearly set forth a method claim. Applicant's counsel discussed amending claim 57 in the manner it has now been amended, that is, to more clearly define a method of performing a dental procedure comprising the steps of providing a dental instrument as defined in the apparatus claims and using said dental instrument to perform a dental procedure. Applicant's counsel has now amended claim 57 as it was agreed during the telephone interview that it would be amended. As discussed during the interview, claim 57 as now presented more clearly defines over the applied references. The applied references are Leins (US 5641251) and Lund (US 5447208). Leins is a drill for machining metal (see column 1, lines 1-42). Lund is a drill bit for boring into the earth. It was recognized during the interview that neither reference teaches or suggests use of a dental drill for a dental procedure. At the conclusion of the interview, the Examiner agreed that a method claim, in the nature of the method claim now presented, defines over the art of record, but that an update search would be done. Applicant's counsel thanks the Examiner for his statement that such a method claim defines over the art of record.

Applicant's counsel then discussed during the interview the apparatus claims. It was agreed that applicant would amend the main apparatus claim, such as claim 26, to clarify that the apparatus is clearly identified as a dental instrument for performing a dental procedure, so as to define over the Leins and Lund references, which do not talk about dental instruments or dental procedures. Accordingly, applicant has amended claim 26 to clarify that the claim is limited to a dental instrument; applicant has specifically added the following limitations to this claim: "said dental instrument being sized and configured to perform a dental procedure in a person's mouth, said dental instrument being sized and configured to rotate at a high speed effective to perform said dental procedure". In summary, the apparatus claim has now been narrowed and clarified so that the apparatus claim is clearly limited to a dental instrument sized and configured to perform a dental procedure. At the conclusion of the interview, the Examiner said that such an apparatus claim appeared to define over the art of record but would need further consideration. Applicant's counsel thanks the Examiner for his statement that such an

apparatus claim appears to define over the art of record.

When claim 26 as now amended is compared to the prior art Leins and Lund references, it is clear that the claim does define over the prior art; for the following reasons.

Dental instruments are quite small so that they can perform a dental procedure in a person's mouth; they are also configured in precise ways so that they can effectively perform dental procedures in the tooth and bone materials of a person's mouth. Leins is a machine tool for drilling metal, and it does not mention or suggest any use or specific configurations for performing dental procedures. More importantly, the Lund reference (US 5447208) does not provide a teaching or suggestion of an extra smooth surface on a ceramic dental instrument; rather, Lund teaches a very smooth surface 40 on a planar polycrystalline diamond compact (PDC) table 12 supported on an underlying substrate 14 (typically sintered tungsten carbide particles) carried on a stud 16 which is fitted into a drill bit 30 (see Lund, Figs. 1-2). The drill bit in Lund is a rotary drag bit, which operates at relatively slow speed to bore through the earth at the end of a long drill string. As shown in Fig. 3 and 4 of Lund, the surface 40 is smoothed so that the earth formation being removed by the rotary drag bit can slide more easily across the face 40 (Fig. 4) rather than building up on face 40 as shown in Fig. 3. In a rotary drag bit operating at slow speed, build-up is a significant problem. However, dental drills operate at high speed on bone and tooth material; these materials fly off at high speed and build-up is not a problem. Accordingly, there is no need for a dental instrument inventor to look to a reference solving a build-up problem, when he has no build-up problem to solve. For these reasons, a person of ordinary skill in the art, looking to improve dental instruments, would not look to the earth boring rotary drag bit of Lund. Accordingly, Leins and Lund, alone or in combination, do not motivate, teach, or suggest the dental instrument for a dental procedure as now narrowly and specifically defined in claim 26.

Support for new claim 64 is found at page 7 lines 7-8; for new claim 65 is at page 7, third to last line; for new claim 66 is at page 8 line 15 (it is believed a person of ordinary skill in the art would understand that these densities are measured in g/cm^3); for new claim 67 is at Figs. 1 and 3 (showing the cutting grooves as twisted around the working member); for new claim 68 is at original claim 1.

For the reasons set forth above, the claims, as now more clearly and specifically presented,

define over the art of record and are now in condition for allowance, which is respectfully requested. If the Examiner sees any problems with the claims as now presented, or finds better references which would require the claims to be amended, he is requested to telephone applicant's counsel so that appropriate amendments can be added to the claims, so as to avoid, if possible, unnecessary further prosecution expense.

If any further fees are required by this communication, please charge such fees to our Deposit Account No. 16-0820, Order No. HOEF-37546.

Respectfully submitted,
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Date: Jan. 27, 2010